

INTERNATIONAL SEARCH REPORT

International Application No

PCT/US2004/026513

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 B23K26/24 B23K26/08 B23K26/10 B23K26/14

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 B23K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|------------|---|---|
| X | US 5 502 292 A (PERNICKA ET AL) 26 March 1996 (1996-03-26) | 1-4, 6, 7, 12-14, 17, 20-28, 30, 31, 33, 34, 39, 40 |
| Y | the whole document | 5, 8-11, 15, 16, 18, 19, 32, 35-38 |
| X, P | DE 102 43 833 A1 (LASER- UND MEDIZIN-TECHNOLOGIE GMBH, BERLIN) 25 March 2004 (2004-03-25) | 1-4, 6, 7, 14, 21, 24, 27-31, 33, 34 |
| | the whole document | |

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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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Date of the actual completion of the international search

13 April 2005

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with Indication, where appropriate, of the relevant passages | Relevant to claim No. |
|------------|---|--|
| X | PATENT ABSTRACTS OF JAPAN vol. 012, no. 057 (M-670), 20 February 1988 (1988-02-20) & JP 62 203694 A (TOYO ALUM KK), 8 September 1987 (1987-09-08) abstract | 1-4, 6, 7, 14, 24, 25, 27, 29, 30 |
| X | PATENT ABSTRACTS OF JAPAN vol. 016, no. 299 (M-1274), 2 July 1992 (1992-07-02) & JP 04 081287 A (KAWASAKI STEEL CORP), 13 March 1992 (1992-03-13) abstract | 1-4, 6, 7, 14, 24, 25, 27, 29, 30 |
| X | PATENT ABSTRACTS OF JAPAN vol. 014, no. 097 (M-0940), 22 February 1990 (1990-02-22) & JP 01 306085 A (KAWASAKI STEEL CORP), 11 December 1989 (1989-12-11) abstract | 1-4, 6, 7, 14, 24, 25, 27, 30 |
| Y | US 4 317 981 A (CHUBAROV ET AL) 2 March 1982 (1982-03-02) the whole document | 8-11, 15, 16, 35-38 |
| Y | EP 0 564 995 A (MITSUI PETROCHEMICAL INDUSTRIES, LTD) 13 October 1993 (1993-10-13) the whole document | 5, 18, 19, 32 |

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US2004/026513

| Patent document cited in search report | | Publication date | Patent family member(s) | Publication date |
|---|----|---------------------|----------------------------|---------------------|
| US 5502292 | A | 26-03-1996 | NONE | |
| DE 10243833 | A1 | 25-03-2004 | NONE | |
| JP 62203694 | A | 08-09-1987 | NONE | |
| JP 04081287 | A | 13-03-1992 | NONE | |
| JP 01306085 | A | 11-12-1989 | NONE | |
| US 4317981 | A | 02-03-1982 | SU 796805 A1 | 15-01-1981 |
| | | | DE 2846500 A1 | 17-05-1979 |
| | | | FR 2407512 A1 | 25-05-1979 |
| | | | IT 1100035 B | 28-09-1985 |
| | | | JP 54089179 A | 14-07-1979 |
| | | | SE 437085 B | 04-02-1985 |
| | | | SE 7811289 A | 01-05-1979 |
| EP 0564995 | A | 13-10-1993 | CA 2093286 A1 | 04-10-1993 |
| | | | DE 69314080 D1 | 30-10-1997 |
| | | | DE 69314080 T2 | 19-02-1998 |
| | | | EP 0564995 A1 | 13-10-1993 |
| | | | JP 6007974 A | 18-01-1994 |
| | | | US 5347528 A | 13-09-1994 |